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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/517,353	03/02/2000	Chad Byron Moore	MRE-9	5133

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EXAMINER
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DOAN, JENNIFER

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/517,353

Applicant(s)

MOORE, CHAD BYRON

Examiner

Jennifer Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-35, 38 and 39 is/are allowed.
- 6) ☒ Claim(s) 26, 31-33, 36, 37 and 40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicants' communication filed on 12/20/2004 has been carefully studied by the Examiner. The arguments advanced therein, considered together with the amendment made to the claims, are not persuasive. In view of further search, however, new references were found to clearly teach the limitations of claims 26, 31-33, 36, 37 and 40. A new rejection based on the new references is set forth below. This action is made final.

#### ***Specification***

1. Applicant cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 26, 36 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Rockwell, III (U.S. Patent 5,748,825).

With respect to claim 26, Rockwell, III (figure 5) discloses a fiber for use in an electronic display (abstract), wherein the fiber comprises at least one wire electrode (5); and at least two transparent materials such that each of the transparent materials have a different index of refraction (column 6, lines 10-25).

With respect to claim 36, Rockwell, III (figure 5) discloses a method of creating a fiber for use in an electronic display (abstract) comprising the steps of forming a preform (column 7, line 30) including at least two distinct materials to be used in the fiber (column 5, lines 49-52) and drawing the preform to form the fiber (column 7, line 30 and 52), wherein the fiber includes at least one electrode (5, figure 5 and column 24, line 59-60).

With respect to claim 40, Rockwell, III discloses a method of creating a fiber, wherein the electrode is co-drawn with the fiber (column 7, lines 22-30).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rockwell, III (as cited above) in view of Terry et al. (U.S. Patent 5,127,078).

With respect to claims 31-33, Rockwell, III substantially discloses all the limitations of the claimed invention. Except Rockwell, III does not explicitly disclose an electronic display is a multiple view display, a three-dimensional display and a stereoscopic display.

However, Terry et al. disclose an electronic display is a multiple view display, a three-dimensional display and a stereoscopic display (abstract and column 1, lines 7-9 and line 55). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Rockwell, III with an electronic display as a multiple view display, a three-dimensional display and a stereoscopic display for the purpose of effectively providing for a higher definition display (column 2, lines 50-53).

6. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rockwell, III (as cited above) in view of Garito et al. (U.S. Patent 5,729,645).

With respect to claim 37, as discussed above, Rockwell, III substantially discloses a method of creating a fiber as claimed; except, Rockwell, III does not explicitly disclose the preform is formed by co-extruding the distinct materials into a preform.

However, the preform being formed by co-extruding the distinct materials into a preform is well known in the art as taught by Garito et al.. Garito et al.

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(column 11, line 60-column 12, line 4) teach that forming a fiber preform by co-extrusion the distinct materials into a preform is a convenient process and easy to apply. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the step of forming a fiber preform of Rockwell, III by co-extrusion the distinct materials (accordance with the teaching of Garito et al.). Doing so would be desirable to facilitate the manufacture of the optical fiber.

***Allowable Subject Matter***

7. Claims 27-30 and 34-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to disclose or reasonably suggest a fiber, wherein the transparent materials form a lens within the fiber as recited in claim 27; further the fiber contains at least two materials stripes having the composition alternates between high and low indices of refraction such that light passing through the fiber is collimated as recited in claim 28; wherein a plurality of alternating high and low index of refraction material regions are formed within the fiber such that the regions redirect light passing through the fiber as recited in claim 29; further a waveguide directs light through an aperture created in the fiber as recited in claim 30; wherein the display is created by varying a focus of an image independently at each individual pixel as recited in claim 34; and further wherein

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the display is created by dynamically varying a distance of a perceived image from a viewer pixel by individual pixel as recited in claim 35.

8. Claims 1-25 and 38-39 are allowed.

The prior art fails to disclose or reasonably suggest a fiber for use in an electronic display, wherein the fiber comprises the electrode and a lens function designed into at least a part of the fiber as recited in claim 1; wherein one absorbing region within the fiber or on the fiber surface which creates an aperture as recited in claim 20.

The prior art also fails to disclose or reasonably suggest subdividing a voltage that creates the appearance of depth in at least one pixel location between more than one of the electrodes in the at least one pixel location such that the appearance of depth is perceived by a viewer to be between either appearance of depth created by applying the voltage to any one of the electrodes as recited in claim 38.

Claims 2-19, 21-25 and 39 are dependent on the allowable claims 1, 20 and 38. Therefore, claims 2-19, 21-25 and 39 are also allowed.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 36 and 37 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00 am to 3:30 pm, second Friday off.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jennifer Doan

Patent Examiner

March 16, 2005



AKM ENAYET ULLAH  
PRIMARY EXAMINER